



## Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact [support@jstor.org](mailto:support@jstor.org).

BULLETIN  
OF THE  
TORREY BOTANICAL CLUB.

---

Vol. XX.

Lancaster, Pa., June 17, 1893.

No. 6.

---

Notes on the Flora of Block Island.

BY W. W. BAILEY.

It had always been my ambition to botanize an island. I have envied Crusoe his leisure and opportunity. The possibility of compassing such a task commends it to the ambitious; one does not, as on a continent, feel appalled by the vast extent of the field. It seems a mere matter of faithful unremitting labor.

The island is of peculiar construction, indeed a vast terminal moraine. There is no rock *in situ*, but only a multitudinous mass of bowlders, pebbles, sand and clay. The bowlders are of various formation, many of them erratic from a long distance. Black magnetic sand is common on the beach. Some of the springs are strongly impregnated with iron. The island, viewed from Beacon Hill, looks like a petrified sea. It presents a most surprising undulating surface, and almost every valley or depression holds a pond or bog.

The cliffs of the south shore are very wonderful. Here we obtain a natural section and can view the strata, for rain, frost, and the action of the sea have denuded the land. I was often reminded of scenes in Nevada.

The mass of the bluff is of pure clay of a pale slate color. Over this is a loose deposit of bowlders and pebbles; over these again the loam. The cliffs, if one may so call them, have weathered into most fanciful shapes; minarets, towers, pinnacles, are piled up at random. Often a huge boulder has lost its bedding and been hurled into the abyss. Again, one will be noticed poised too perilously near the brink; it is a mere question of time

when it falls. On the most prominent bluff of all stands the southeast lighthouse. The keepers assured us that the sea was surely encroaching on the land.

I have never seen so changeable a shore. On one day the beach would be firm, hard sand; the next a mass of rattling pebbles. One could scarcely believe it was the same place.

The bogs and pond holes had a perennial fascination for me. There are said to be some three hundred on the island, and I can well believe it. They are filled with pond lilies, and surely there is no place in the world where they are finer. Occasionally a pink one turns up.

About these pond-holes grow, in the peat, a great variety of interesting plants. Two species of sundew were found, the *Drosera rotundifolia*, and *D. intermedia* var. *Americana*. *Rhexia Virginica* was common. I never before saw so much of the ragged orchis (*Habenaria lacera*). Everywhere the swamp loose-strife, *Decodon*, was abundant. Here, too, could be seen quantities of *Iris versicolor*, three *Eriophorum*s, cat-tails, sedges and grasses.

The prevailing shrub in the swamps was *Cephalanthus occidentalis*. In smaller quantities grew *Rosa Carolina*, and *Clethra alnifolia*. We found one bush only of what appeared to be *Ilex laevigata*. Willows were by no means common, and no species of *Alnus* was seen at all. Think of growing up without a knowledge of alder-tags! Trees of any sort are extremely scarce. Those there are, appear, with rare exceptions, to have been planted. Mr. J. F. Collins and myself, however, found a few small tupeloes, *Nyssa aquatica*. White poplars are the trees most cultivated. I saw besides a few *Ailanthus* trees and locusts. Protected apple-orchards do well. I found also one lone and stunted hickory. There is no sign anywhere of a conifer. Here and there one meets with good clumps of bayberry (*Myrica cerifera*), but *Comptonia* was not seen at all.

On the whole the flora, considering the situation, seemed to me very rich. We identified 294 species of plants and have some dozen or more things yet to determine. Then, too, the early season no doubt would reveal many things, while we lost nearly all the *Asters*; I think there are probably six or eight of these.

The region might well be mapped out into districts, as, of the

bogs, the many fresh ponds, the Great Salt Pond, the meadows, the cliffs, and the shore. One might, indeed, include another province, in the range of the Algæ, these, however, from the changeable nature of the shore, are not so abundant as in many places along our coasts. Still we found glorious specimens of *Ascophyllum*, *Fucus*, and *Laminaria*.

Near the beach, of course, one finds *Anagallis arvensis*, a cosmopolitan plant. Here, too, are *Cakile edentula*; the curious sea-sand-wort, *Arenaria peploides*; sow thistle, *Sonchus asper*; *Suaeda*, *Salsola*, and *Solidago sempervirens*. The last grows magnificently, but was hardly in flower even when I left. I found in all seven species of golden-rod on the island, as will be seen by the appended list. *Solidago lanceolata* is, I think, the commonest weed on the island. It covers whole pastures and fringes every road. In some places the *S. Caroliniana* was about as common. We noticed quite a difference in the time of flowering of the two species, the last preceding the *S. lanceolata* by perhaps a week.

There is the usual host of weeds, among which the wild carrot is preëminently first. *Chrysanthemum Leucanthemum*, is a good second. Now and then one meets with a clump of *Rudbeckia hirta*. It is misnamed "ox-eye" throughout Rhode Island. There were four species of thistle, the "Canada" being well to the front.

My habit was to jot down in a note book, as I walked, whatever plants I saw, the walk being mainly for the special purpose of discovery. I also collected somewhat. For one week, long to be remembered by us both, I had the assistance of my young friend, Mr. J. F. Collins, of Providence.

Incidentally we observed the butterflies, finding, to our surprise, a large number of specimens of *Janonia cænia*. Hitherto it has been only sporadically found in the State. The abundance of *Papilio Asterias* is explained from the prevalence of Umbelliferæ. The carrot and *Sium cicutæfolium* are everywhere. Nothing umbelliferous probably ever escapes the larva of *Asterias*, though I never happened to see it on *Discopleura*, so frequent here. *Danaïs Archippus* had found out that *Asclepias Syriaca* was here and hung his green and gold chrysalis on the leaves.

Among the plants new to Rhode Island, we found *Potamogeton*

*pulcher*, and *Gaylussacia dumosa*, var. *hirtella*. There are seven ferns on our list, among them *Woodwardia areolata*. Although we found only its barren frond, we feel quite sure that no *Onoclea* deceived us. The two can be discriminated when placed side by side; we saw no *Pteris aquilina*. There were several *Equisetums*, and a number of mosses and lichens. Not a single plant of the lily family presented itself. This seems peculiar. One might at least expect some *Smilacina*. Among the orchids, besides the "ragged" already mentioned, we had *Gyrostachys præcox*, *G. simplex* and *G. gracilis*.

I have spoken of the total absence of Liliaceæ. It is curious to notice this non-appearance of the commonest plants of the main land. Thus, there were no *Lespedezas*, *Meibomias*, nor *Baptisias*. Not a specimen of *Hibiscus Moscheutos* was seen, nor any of the gentians, nor *Sabbatias*; Gentianaceæ are represented by *Limnanthemum* and *Menyanthes*. *Elatine Americana* was abundant in and around Sands, Pond. *Sagina procumbens* formed verdant clumps about the little springs on the cliffs. *Linum striatum* was abundant in the swamps. I saw no true *Geranium*, but the family Geraniaceæ was represented by *Oxalis corniculata* var. *stricta*, and by *Impatiens biflora*. *Ampelopsis quinquefolia* was so uncommon as to be called rare. *Rhus radicans*, while not so common as on the mainland, was far too abundant. *Rhus venenata* was not seen at all, though many localities seemed favorable for it. *Polygala polygama*, and *P. viridescens* were common. There were no Lupines nor *Cassias*, but *Lathyrus maritimus* thrived on the southern cliffs, and we found also the genera *Phaseolus*, *Medicago* and *Trifolium*. Among the clovers was *Trifolium hybridum*, now seen everywhere in New England.

Rosaceæ were represented by *Spiræa tomentosa* and *S. salicifolia*, *Prunus maritima*, several species of *Rubus*, *Fragaria vesca*, the usual weedy *Potentillas*, and *Rosa Carolina*. The last formed quite abundant copses. We saw no Saxifragaceæ, which seems a little odd. I expected *Parnassia* at least. *Myriophyllum pinnatum*, was found in especially fine condition. Among Compositæ was the camphor-weed, *Pluchea camphorata*, growing with unusual vigor. To me it smells of anything but camphor. I was surprised to find *Cichorium Intybus* well established. As a rule, it is somewhat

local in Rhode Island, and does not make itself at home as in Eastern Massachusetts. It is, with its large, deep-blue heads, a highly ornamental nuisance. I saw but one *Lobelia*, the common Indian tobacco, *L. inflata*. Among Primulaceæ I was glad to find a fine bed of *Samolus*. It grows in the sand near the Great Salt Pond.

The Labiatae were represented by eleven genera and thirteen species—a good showing—among them was *Melissa officinalis*. *Polygonum* was another genus with full ranks. We recorded eight species. The surprising height of some plants was noticeable; thus some *Sparganiums* and *Sagittarias* were the giants of their race. I have a list of 28 grasses, and am sure that a number more might be found. Both Mr. Collins and myself rigorously excluded everything from our catalogue of which we had any lingering doubt.

I found myself speculating much, and perhaps wildly, as to the origin and remote history of these insular plants. How came they here? Are they in some cases descendants of old continental forms existing while yet Block Island was part of the mainland? On the other hand, did birds, winds, tide-currents, or the operations of man introduce them? Of course we can account for the presence of grasses and weeds. But how about the endemic species? The flora seems to me pretty full for the situation. Those who consult the following list will be struck by its length and by the curious lacunæ.

### A List of Plants found on Block Island, R. I., in July and August.

BY W. W. BAILEY AND J. F. COLLINS.

(From July 19th to end of August, 1892.)

#### RANUNCULACEÆ.

1. *Ranunculus Cymbalaria*, Pursh. Abundant about the Great Salt Pond, Aug.
2. *Ranunculus repens*, L.
3. *Ranunculus acris*, L.

#### NYMPHÆACEÆ.

4. *Castalia odorata* (Dryand.) Woodv. and Wood. Extremely abundant in nearly all the numerous fresh water ponds. Flowers in some instances measuring from 7 to 9 inches in diameter. Occasionally pink.
5. *Nymphæa advena* (Soland.), Greene. Quite common.